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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
LAZARO, DAVID R	

ART UNIT	PAPER NUMBER
2155	

DATE MAILED: 06/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/845,083	MANTEGNA ET AL.	
	Examiner	Art Unit	
	David Lazaro	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,8-16,18-26 and 28-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6, 8-16, 18-26 and 28-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the amendment filed 06/06/2006.

2. The examiner has reopened prosecution of this case based on applicants' remarks.

3. Claims 1-6, 8-16, 18-26 and 28-33 are pending in this office action.

Response to Amendment

4. Applicant's arguments, see page 3 of the remarks, filed 06/06/2006, with respect to the rejection(s) under 102(a) as being anticipated by Hodson have been fully considered and are persuasive. Particularly, the examiner agrees with the remarks starting on page 3 under section 2. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent 6,683,889 by Shaffer et al.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-6, 8-16, 18-26 and 28-33 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,683,889 by Shaffer et al. (Shaffer) in view of "Skew

detection and compensation for Internet audio applications" by Hodson et al., ICME 2000, July 2000, Vol. 3 (hereinafter Hodson).

7. With respect to Claims 1, 11 and 21, Shaffer teaches a method and corresponding computer program and computer system for dynamic latency management in a real-time electronic communication comprising:

measuring a communication delay arising from a receiving data buffer (Col. 5 lines 23-40 and Col. 2 lines 16-20: arrival rate characteristics are measured to determine buffer occupancy in terms of communication delay);

determining a latency adjustment necessary to adjust the size of the communication delay to within a predetermined range (Col. 5 lines 23-40 - necessary adjustment determined according to the thresholds ;

determining a range for a size of the communication delay based on the measured communication delay (Col. 5 lines 23-40 and line 50 - Col. 6 line 4: the threshold range may be adjusted based on the adjustments to the buffer occupancy which is adjusted based on the measured communication delay); and

modifying a number of samples of a playback data block passing through the receiving data buffer based on the latency adjustment determined to be necessary to adjust the size of the communication delay and on the range determined for the size of the communication delays (Col. 5 lines 23-40, Fig. 6 and Col. 3 lines 5-11: a number of samples are modified based on the measured communication delay and threshold range. Modifications may include inserting or removing silent periods.).

Shaffer does not explicitly disclose wherein modifying the number of samples further comprises performing heuristic resampling of a playback block. Hodson teaches modifying samples by performing heuristic resampling of a playback block (Page 2, section 3, particularly the second paragraph under section 3 - sample modifications are performed using heuristic resampling).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method (and corresponding computer program and computer system) disclosed by Shaffer and modify it as indicated by Hodson such that it further comprises wherein modifying the number of samples further comprises performing heuristic resampling of a playback block. One would be motivated to have this, as it is desirable to be able to modify samples without introducing audible distortions (Page 2, section 3, first paragraph and section 4, first paragraph).

8. With respect to Claims 2, 12 and 22, Shaffer further teaches wherein the number of samples is modified without introduction audible artifacts (In Hodson: Page 2, section 3, first paragraph and section 4, first paragraph).

9. With respect to Claims 3, 13 and 23, Shaffer further teaches wherein measuring the communication delay comprises measuring an instantaneous communication delay associated with the receiving data buffer (In Shaffer: Col. 2 lines 16-23 and Col. 5 lines 23-31).

10. With respect to Claims 5, 15 and 25, Shaffer further teaches wherein the real-time electronic communication includes an audio communication (In Shaffer: Col. 2 lines 56-65).

11. With respect to Claims 6, 16, and 26, Shaffer further teaches determining receiving buffer delay upper and lower bounds (In Shaffer: Col. 5 lines 23-40).

12. With respect to Claims 8, 18 and 28, Shaffer further teaches wherein performing heuristic resampling comprises: analyzing multiple consecutive samples of audio data in the playback block; identifying consecutive samples with minimal variation in a parameter of their data; and adjusting the number of samples in the identified consecutive samples (In Hodson: Page 2, section 3).

13. With respect to Claims 9, 19 and 29, Shaffer further teaches wherein adjusting the number of samples comprises removing a sample from the identified consecutive samples (In Hodson: Page 2, section 3).

14. With respect to Claims 10, 20 and 30, Shaffer further teaches wherein adjusting the number of samples comprises adding a sample from the identified consecutive samples (In Hodson: Page 2, section 3).

15. With respect to Claims 31, 32 and 33, Shaffer further teaches wherein the range determined for the size of the communication delay is an optimal range (In Shaffer: Col. 2 lines 16-27)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lazaro whose telephone number is 571-272-3986. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David Lazaro
June 19, 2006

SALEH NAJJAR
SUPERVISORY PATENT EXAMINER